

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Service Rules for the 698-746, 747-762)	WT Docket No. 06-150
and 777-792 MHz Bands)	
)	
Implementing a Nationwide,)	PS Docket No. 06-229
Broadband, Interoperable Public)	
Safety Network in the 700 MHz Band)	

COMMENTS OF THE DISTRICT OF COLUMBIA

I. SUMMARY AND INTRODUCTION

By these comments, the District of Columbia(“District”), represented by the Chief of Fire and Emergency Medical Services, the Director of Homeland Security and Emergency Management, the Chief of Police, and the Chief Technology Officer, urge the Commission to provide relief from the regulatory uncertainty that has caused further deployment of the nation’s first and only public safety broadband network in the 700 MHz band to stall and may result in shutting down the network. In the *Second Report and Order*,¹ the Commission permitted the

¹ Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 06-169, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Development of Operational, Technical and Spectrum
(cont’d)

National Capital Region (“NCR”) jurisdictions, which include the District, to build and operate the Regional Wireless Broadband Network (“RWBN”) with the caveat that the RWBN could be subsumed into a national public safety broadband network at any time following the negotiation of a Network Sharing Agreement (“NSA”) between the national public safety licensee and the D Block winner. The NSA also would determine the amount of compensation that would be paid for the subsumed network. As a result, until the identification of a D Block licensee and the completion of the NSA, NCR executives could not develop a meaningful business case for a financially sustainable network. In the face of such uncertainty, funding of the network ceased. The failure of Auction 73 to identify a D Block winner extended indefinitely the period of uncertainty, further delaying the provision of critical interoperable communications capabilities to first responders in District and the rest of the NCR. The network is deployed only in the District, and even within the District it is not yet complete.

The District welcomes this opportunity to provide comments in response to the *Second Further Notice*,² because its first responders need mobile access to critical broadband applications without further delay. We urge the Commission to provide the following regulatory relief to enable us to make a valid business judgment about the financial viability of further deploying and operating the RWBN:

Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, Declaratory Ruling on Reporting Requirement under Commission’s Part 1 Anti-Collusion Rule, WT Docket No. 07-166, *Second Report and Order*, 22 FCC Rcd 15289, ¶ 386 (2007) (*Second Report and Order*) recon. pending.

² Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, *Second Further Notice of Proposed Rulemaking*, FCC 08-128 (rel. May 14, 2008) (*Second Further Notice*).

- allow the District to continue deploying and operating the RWBN for ten (10) years from the date of decision, or require any national network subsuming the RWBN to provide service to District users for ten (10) years free of charge.
- authorize the District to use the 700 MHz broadband spectrum for ten (10) years from the date of decision or until the RWBN is subsumed into a national network.
- permit the RWBN to provide service to as broad a range of users as possible, including municipal, state, and federal users, as well as second-tier public safety users and incident response and recovery support functions not typically defined as “first responders,” and permit the District to offer service and assign priority levels to specific groups of users as the District deems appropriate and necessary to sustain the RWBN financially.

II. BACKGROUND

Beginning in 2005, with a federal Urban Area Security Initiative (“UASI”) grant of \$3,750,000, the executives of the 21 NCR jurisdictions established the NCR Interoperability Program (“NCRIP”) to develop data and communications interoperability for public safety agencies in the NCR. The NCRIP included three projects: the NCRNet, to connect the institutional fiber networks already deployed by NCR jurisdictions; the Data Exchange Hub (“DEH”), to provide a platform for the exchange of public safety data between NCR jurisdictions; and the RWBN, to provide seamless, interoperable, mobile broadband communications for first responders region-wide. Before starting work on the RWBN, the NCR deployed the Wireless Accelerated Response Network (“WARN”), a 700 MHz pilot network using Flarion’s OFDM technology in the District. Approximately 200 public safety users tested broadband data applications on WARN between January 2004 and December 2007 when users began to migrate to the RWBN.

The RWBN was designed as a multi-year, UASI grant-funded deployment, potentially providing reliable on-street coverage of the entire 2,500 square miles and over 4 million

residents of the NCR. The network would provide dedicated, secure wireless transport of data such as situational incident information, high-resolution images, live-scene streaming videos, maps and other high bandwidth data applications critical for joint incident response.

A. The *Second Report and Order* Caused Uncertainty and a Funding Crisis.

The NCR had already constructed the WARN pilot network and begun construction of the RWBN when the Commission issued the *Second Report and Order*, announcing its intent to leverage the commercial value of the 700 MHz D Block and public safety broadband spectrum to enlist a commercial entity to build a national public safety broadband network for first responders, saving local jurisdictions the cost of deploying their respective networks.³ Though the Commission was clear that “participation in the 700 MHz nationwide public safety network by individual public safety entities will be entirely voluntary,” it provided only two limited circumstances in which “public safety entities [were permitted] to construct local broadband networks in the 700 MHz public safety spectrum.”⁴ Both of these circumstances required the

³ Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, WT Docket No. 06-150, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Section 68.4(a) of the Commission’s Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket 03-264, Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 06-169, Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket No. 06-229, Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, WT Docket No. 96-86, Declaratory Ruling on Reporting Requirement under Commission’s Part 1 Anti-Collusion Rule, WT Docket No. 07-166, *Second Report and Order*, 22 FCC Rcd 15289, ¶ 386 (2007) (*Second Report and Order*) recon. pending.

⁴ *Second Report and Order*, ¶ 470.

existence of a Network Sharing Agreement (“NSA”) between the national public safety licensee and the D Block licensee.⁵

The Commission did, however, recognize that construction of the RWBN had already begun in the NCR, using 700 MHz spectrum under an experimental license and waiver.⁶ As a result, the Commission made an exception to its rule against public safety entities constructing and operating networks within the 700 MHz broadband spectrum. Specifically, the Commission permitted the NCR to continue to build out the RWBN and operate it “until such time as the NCR network is integrated into the nationwide, interoperable broadband network in accordance with the build-out plan set forth in the NSA.”⁷ Nevertheless, the Commission was clear that even if the NCR did continue to build out and operate the regional network, the RWBN would

⁵ *Second Report and Order*, ¶¶ 473-74 (national public safety licensee, D Block licensee, and local public safety entity must agree to construction in an amendment to the NSA, but local entity may not operate the local network); and ¶ 480 (allowing local build-out where NSA does not require D Block licensee to build out).

⁶ *Second Report and Order*, ¶ 476, citing Request by National Capital Region for Waiver of the Commission’s Rules to Allow Establishment of a 700 MHz Interoperable Broadband Data Network, WT Docket No. 96-86, *Order*, 22 FCC Rcd 1846 (PSHSB 2007).

⁷ *Second Report and Order*, ¶ 476 (“nothing herein should be construed as preventing or limiting NCR’s ability to continue to operate the broadband network they have built within the 700 MHz broadband allocation (subject to NCR properly obtaining a grant of a request for Special Temporary Authority for such continued operation”). The Commission subsequently granted and later renewed a six-month Special Temporary Authority to the District of Columbia to operate the RWBN within the District. Special Temporary Authorization, File No. 0003149202, Call Sign WQHY489 (Nov. 1, 2007); Special Temporary Authorization, File No. 0003397425, Call Sign WQHY489 (April 28, 2008); Special Temporary Authorization, File No. 0003151108, Call Sign WQHY490 (Nov. 1, 2007); Special Temporary Authorization, File No. 0003397644, Call Sign WQHY490 (April 28, 2008).

eventually be subsumed into the national network and operated pursuant to the terms of an NSA for which negotiations would not begin until after a successful auction.⁸

In light of the Commission's plan to cause a commercial entity to build a public safety network at no cost to state and local jurisdictions, executives in the NCR elected to put federal homeland security grant funds toward other, competing priorities.⁹ The RWBN, nearing completion in the District, thus faced a funding crisis born of uncertainty. A valid business case for further investment could not be made without knowing the date upon which the RWBN would be subsumed into the national network and the amount of compensation that would be received for the network when subsumed. The District awaited the results of the D Block auction and the negotiation of the NSA to answer these questions. The failure of Auction 73 to identify a D Block winner extended that period of uncertainty, further delaying the provision of critical interoperable communications capabilities to first responders.¹⁰

⁸ *Second Report and Order*, ¶ 477-78. The Commission stated that the NCR may receive compensation for its deployment when the NCR network is subsumed into the national network, but the amount of such compensation, too, is dependent on the identity of the D Block licensee and the terms of the NSA. *Second Report and Order*, ¶ 478 ("NCR shall be entitled to the same rights and compensation as set forth herein for public safety entities electing to exercise their right to early build out."), ¶ 473 ("The right to compensation for the [early] build-out shall be limited . . . to the cost that would have been incurred had the D Block licensee constructed the network itself in accordance with the original terms and specifications of the NSA.")

⁹ Likewise, the NCR has focused on other homeland security projects, and not the RWBN, in new proposals for federal funding.

¹⁰ "Auction of 700 MHz Band Licenses Closes," *Public Notice*, DA 08-595 (rel. Mar. 20, 2008); Auction of the D Block License in the 758-763 and 788-793 MHz Bands, AU Docket No. 07-157, *Order*, FCC 08-91, ¶ 3 (rel. Mar. 20, 2008) (Commission will not re-offer the D Block license immediately after Auction 73 in order to "provide additional time to consider options with respect to the D Block spectrum.").

B. Current Network Status

As currently deployed, the RWBN consists of twelve (12) base stations and a primary core, all within the District of Columbia, providing 80-95 percent coverage outdoors in the District. Five (5) additional base stations and a redundant core have been purchased but are in storage, pending funding for installation. The RWBN is a dedicated public safety network not subject to contention from commercial users. It uses EVDO revision A technology (the same as Verizon Wireless and Sprint) and will support roaming onto commercial networks in the 1.9 GHz band (currently under negotiation). The network's uplink rate peaks at 1.8 Mbps (600 Kbps is average); the peak downlink rate is 3 Mbps (1.2 Mbps average).

District of Columbia and federal agencies currently use approximately 100 PCMCIA cards on the RWBN on a pilot basis. The RWBN and its predecessor network, WARN, have provided streaming video capability and other applications for such high profile events as the Fourth of July celebration on the National Mall, the Presidential Inauguration, the State of the Union Address, and the pope's recent visit.

C. Options for Averting Shutdown of the RWBN Require Resolution of the Uncertainty Caused by the *Second Report and Order*.

As described above, the prospect of a public safety broadband network built by a commercial entity at no cost to NCR jurisdictions led NCR executives to direct federal homeland security grant funding away from the RWBN and toward other priority projects. The NCR had already spent \$8.2 million in federal funds on the network. Because the network now provides substantial coverage only within the District of Columbia, it fell to the District government to keep the network moving forward. The District, however, had not expected to assume this burden, and so had no provision in its budget for the RWBN, even in pilot mode. Nevertheless, a skeleton staff at the District's Office of the Chief Technology Officer keeps the network running,

with additional support from the vendor that built the network, Alcatel-Lucent, which has contributed approximately \$1 million of services. Though pilot operations and the development of a roaming arrangement are proceeding, the purchase of additional devices and the completion of the network within the District—not to mention any expansion of the network outside the District—have been put on hold. Facing a year of shrinking budgets, the District does not have the resources to continue to carry the network indefinitely and will have to shut it down if it cannot find alternative funding sources.

On May 1, 2008, the Interoperability Committee (“IC”) of the Chief Administrative Officers of the NCR issued a Request for Information with two critical objectives: (1) expanding and scaling the network within the NCR, and (2) producing a business model for the operation of the RWBN that ensures the network’s financial solvency. The Committee is currently evaluating eleven (11) responses from carriers, manufacturers and other commercial entities, searching for ideas and information that will help identify a business model that can sustain the network and enable the NCR to realize the substantial benefits the RWBN can provide public safety agencies.

A logical source of funds would be subscription fees paid by users, and the District has been working to assess the ability and willingness of local and federal government entities to shoulder such fees. The uncertainty of the future of the network, however, makes this option unworkable—without knowing that the network will persist, potential subscribers are hesitant to commit. Even if they were willing, they are constrained, because prior to the *Second Report and Order*, they expected federal funding to continue and so did not include this cost in their budgets.

III. THE COMMISSION SHOULD SUPPORT PUBLIC SAFETY BROADBAND DEPLOYMENT IN THE DISTRICT AS SOON AS POSSIBLE.

The Commission has been emphatic in its desire to use 700 MHz spectrum for an interoperable broadband network for public safety—indeed, that was a central goal of the *Second*

Report and Order.¹¹ Ironically, the Commission's effort to reach that goal is threatening the viability of the RWBN, which *is* an interoperable, 700 MHz broadband network for public safety.

A. The RWBN Is the Best Option for Enabling Critical Public Safety Applications in the Near Term.

Achieving the public-private partnership envisioned by the Commission and constructing the requisite infrastructure to create the national network will take time—as it turns out, longer than originally anticipated. In the meantime, first responders in the District still need reliable, mobile broadband applications. Though commercial networks may provide public safety agencies the capacity they need for day-to-day operations,¹² they do not offer the dedicated availability and security required by public safety in the event of an emergency when commercial networks are jammed with civilian traffic. Thus, the best option for wireless broadband service adequate for public safety in the District and available in the relatively near term is the RWBN. The Commission should support efforts to finish deploying the RWBN in the District.

¹¹ *Second Report and Order*, ¶ 3.

¹² Some commercial services will not permit the use of their networks for streaming video, which is a critical application for public safety. For example, AT&T's Wireless Data Service Terms and Conditions prohibits "uses that cause extreme network capacity issues [including] server devices or host computer applications, including, but not limited to, Web camera posts or broadcasts." Available at <http://www.wireless.att.com/learn/messaging-internet/media-legal-notice.jsp>.

Expert reports take as a given that the District and the NCR are top targets, vulnerable to terror attack.¹³ But our need for emergency communications is not entirely related to homeland security. Even weather and other commercial network outage-related events can result in jammed commercial networks that keep public safety communications on the commercial networks from getting through. During each of these events, users of the RWBN—and WARN before it—have maintained their service, using public safety applications from streaming video to Internet access.

In November, there will be a presidential election, followed in January by a presidential inauguration in the District. It is uncertain if the D Block will have been auctioned by then, but the RWBN is already here, and it could help provide first responders access to broadband applications that may prevent or help control any adverse incidents surrounding these high-risk security events. Even before any build-out in other parts of the NCR, RWBN users in the District would be able to use commercial networks in the 1.9 GHz band when outside the RWBN coverage area. It was because of advanced broadband wireless data interoperability, based on commercial technologies supporting economies of scale and roaming to cellular networks, that the National Telecommunications and Information Agency (“NTIA”) of the Department of

¹³ See Testimony of James W. Spears, West Virginia Homeland Security Advisor before the U.S. Senate Select Committee on Intelligence, at 5 (Jan. 25, 2007), available at <http://intelligence.senate.gov/070125/spears.pdf> (“It is no secret that Washington D.C. and New York City are at the top of the international terrorist hit list and that today’s terrorists are looking at how to inflict the most catastrophic of blows on our nation.”).

Commerce recognized the RWBN's model and predecessor network, WARN, as an exemplar for regional collaboration and interoperability.¹⁴

Perhaps the greatest reason why the Commission should support continued deployment of the RWBN in the District is because first responders—including the undersigned—are clear that they want the capabilities the RWBN would provide as soon as possible. Already the NCRIP is working to share CAD data and GIS maps across the region and the District's police and fire agencies are placing video cameras and computers in vehicles, all of which underscores the need for mobile broadband connectivity.

B. An Operable RWBN Would Offer a Test Bed for Applications and Devices in Preparation for Other 700 MHz Public Safety Broadband Networks.

Whether the Commission continues to pursue a single national public safety broadband network in the 700 MHz band or adopts a different approach embracing multiple, perhaps regional, interoperable networks, the effort would benefit from the use of the RWBN as a test bed for applications and devices that would help boost later network deployments outside the District.

For example, the District and the Department of Homeland Security are currently engaged in a cooperative project to develop and test push-to-talk capabilities on the RWBN integrated with the District's legacy LMR network, made graphically accessible via a GIS

¹⁴ "Spectrum Policy for the 21st Century, The President's Spectrum Policy Initiative: A Public Safety Sharing Demonstration," U.S. Department of Commerce (June 2007), available at <http://www.ntia.doc.gov/reports/2007/NTIAWARNReport.htm>.

interface on handheld ultra-portable computers.¹⁵ This early work on the RWBN will give a boost to the adoption of future public safety broadband deployments, whether on a national, regional or local scale. In addition, the testing of applications, the experience the District will gain from direct interaction with RWBN end users, standard operational procedures developed for the RWBN, and other direct experience with this network will greatly advance the national interest and adoption of future public safety broadband networks. Ongoing uncertainty with regard to the network's financial viability as described above, however, limits the District's ability to engage in similar cooperation with other public and commercial entities to use the RWBN as a test bed.

IV. THE COMMISSION SHOULD ADOPT A FRAMEWORK THAT ENABLES THE NCR TO COMPLETE AND OPERATE THE RWBN FOR PUBLIC SAFETY.

Challenges remain with regard to completing deployment of the RWBN within the District, and underlying each challenge is the same central issue: the regulatory environment has clouded the future of the network with such uncertainty that the District has been unable to develop a valid business case to support directing any available funding toward completion of the network as planned. The District urges the Commission to correct this situation by providing certainty in (1) the minimum amount of time the District will have to realize the benefit of the investment in the RWBN, including the period the RWBN will be permitted to use the 700 MHz

¹⁵ The District of Columbia and the Department of Homeland Security have partnered on the demonstration of Radio Over Wireless Broadband ("ROW-B"), whereby the District RWBN network and commercial broadband networks together will support direct communications over the Radio over Internet Protocol (RoIP) technology of next generation Land Mobile Radio (LMR) Project 25 networks. See Jackson, Donnie, "DHS Launched Radio-Over-Wireless-Broadband Pilot," *MRT* ("Oct. 4, 2008), available at http://mrtmag.com/news/dhs_broadband_pilot_100407/.

public safety spectrum and (2) identifying which entities may be considered within the potential pool of subscribers for the RWBN.

A. The Commission Should Provide Certainty of the Time Period Within Which the District May Realize the Benefit of the Investment in the RWBN, Including the Spectrum Use Authorization Term.

Perhaps the most significant obstacle facing the District in developing a sustainable business model for the RWBN is that it cannot ascertain how soon the network will have to provide a return on investment—regardless of the source of funding. Even using federal grants to support the RWBN requires a decision to forego putting those federal funds toward other public safety projects. As a result, the District must be confident that the use of limited grant funding for the RWBN is not wasted; in other words, if the District uses additional federal money to continue the build-out of the network, will the District reap the benefit of that investment in the form of lower monthly operational costs? If so, for how long will that benefit apply? Will the RWBN be subsumed into a national network under terms that require users to pay higher monthly fees than they had been paying prior to the RWBN being subsumed? How much higher?

As described above, the current regulatory status leaves all these questions unanswerable. Until there is a successful auction of the D Block spectrum, and until an NSA is agreed upon by the D Block winner and the national public safety licensee, nobody can know the date upon which the RWBN will be subsumed or the terms under which its former users will be invited to become users of the national network. Likewise, without knowing the identity of the D Block winner and the terms of the NSA, it is impossible even to estimate the amount of compensation the D Block winner will pay for the subsumed network under the Commission's regulations.

1. Allow the NCR to Operate the RWBN for Ten Years, or Provide Free Service for Ten Years

In order to provide a certain and reasonable period to realize a return on further investment in the RWBN—in addition to the \$8.2 million of federal funds already spent—the District requests the following regulatory relief: the Commission should either

- allow the District to continue deploying and operating the RWBN for ten years from the date of decision, or
- require that any national network subsuming the RWBN will provide service to District agencies for ten years free of charge.

Such clarity will help the District to weigh the pros and cons of further investment in the RWBN. Without this regulatory relief, neither the District nor even potential private partners will be able to assess the financial viability of proceeding with this project, despite the obvious and immediate public safety benefits of doing so.

2. Grant the Right to Use the Spectrum for Ten Years or Until the RWBN Is Subsumed into a National Network.

The Commission's grant of authorization for the RWBN to use the 700 MHz spectrum also complicates development of the requisite business case. Though the Commission on November 1, 2007 granted the District a Special Temporary Authorization to use the 700 MHz broadband spectrum, that authorization was for only six (6) months. On April 28, 2008, the Commission again granted the authorization, again for only six (6) months. Consistent with the requested regulatory relief above, the Commission should authorize the District to use the 700

MHz broadband spectrum for ten years from the date of decision or until it is subsumed into a national network.¹⁶

B. The Commission Should Provide Certainty in the Allowable User Base to Support Network Costs.

Part of developing a workable business case involves identifying a potential base of subscribers that is sufficiently large to cover the costs of operation and maintenance by paying affordable monthly charges. In order to enable the District to maximize the size of the RWBN's potential subscriber base, the Commission should permit the District to provide service to as broad a range of users as possible. Such users should at least include municipal, state, and federal first responders, as well as other public safety users and incident response and recovery support functions not typically defined as "first responders." Because the RWBN supports the ability to assign various levels of priority among users, the network can provide service to a broad range of users during typical day-to-day operations and still serve its core mission as a first responder network during emergencies. The decision to offer service and assign priority levels to specific groups of users should be left to the District as it deems appropriate and necessary to sustain the network financially.

¹⁶ If the RWBN is finished within the District and operated, it presumably would be used by virtually all public safety broadband users in the District. As a result, the Commission should consider allowing the District to use all of the 700 MHz public safety broadband spectrum, rather than just the 1.25 MHz paired it currently uses. The District is currently authorized to use spectrum that will become reserved for narrowband services; the District will relocate the RWBN to broadband spectrum as required by the new band plan.

V. CONCLUSION

For the foregoing reasons, the District of Columbia urges the Commission to adopt a regulatory framework that enables it to further deploy and operate the RWBN, as described herein.

Respectfully submitted,

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